

IDAHO COMMUNITY TREES

News You
Can Use

No. 41
Winter
2007

A NEWS BULLETIN FROM THE UNIVERSITY OF IDAHO, THE IDAHO DEPARTMENT OF LANDS—COMMUNITY FORESTRY PROGRAM AND THE IDAHO COMMUNITY FORESTRY ADVISORY COUNCIL

Is your city receiving its share of available grant money? See page 3.

Coordinator's Column

When Strong Winds Blow — Are small trees the answer?

If hot and extremely dry characterized the weather this past summer, then wet and extremely windy has defined it over much of the Pacific Northwest since. Much of our region experienced one of the wettest falls on record followed by record setting winds. On December 14-15, for instance, wind speeds from 50 to 118 mph blew down thousands of trees in saturated soils across the Pacific and Inland Northwest, including one large ponderosa pine in my yard. Photos of trees on cars and houses along with headlines such as "Trees [are] a Threat" showed up in our local newspapers as did the inevitable calls to plant smaller "safer" trees. But is size really the cause of whole tree failures?

The roots and trunk of a tree and its flexibility provide its strength. Like our own reaction to resistance exercise, trees actually grow stronger when subjected to wind. Studies have shown wind causes trees to grow shorter while increasing diameter growth, creating stronger trees more resistant to wind. Root systems on the lee and windward sides also grow larger to better anchor the tree.

But many new housing developments, including the one in which I live, are built in former forests that have been heavily thinned. Once protected by the trees around them, the remaining trees are now out in the open, subjected to winds they've never before experienced. At the same time, these tall trees provide many more



James R. Fazio

Large trees, like this sequoia in the University of Idaho Arboretum, have natural mechanisms for stabilizing themselves despite their height – if planted in the right place and given reasonable care to prevent stress.

benefits to the area than do smaller ones. How do we balance these benefits with safety?

An obvious answer is to leave groups of trees when thinning to preserve a more forest-like environment with trees better protected from wind. Thinning a stand slowly over several years also helps give trees time to develop greater wind resistant structure.

Since soil compaction damages roots, decreasing their ability to anchor the tree, fencing off these trees during construction will also help maintain their structural stability. Not cutting the roots of trees within the critical root zone is essential wherever trees are located.

Stem compression caused by planting too deeply can also lead to whole tree failures. Instead of growing down and out into the top layer of soil, as in nature, the roots of trees planted too deeply grow up and out. Since trunk and roots are now at the same level, they will someday meet as each grows larger. Studies have shown these "girdling roots" not only constrict movement of nutrients between trunk and crown, they also create a weakness at the point of compression that is prone to failure. Other factors, such as over irrigation or fertilization can also predispose trees to structural failure. For more information, see page 2.

Many causes are involved in whole tree failures and some, such as ice, rain and wind, are beyond our control. But there are nonetheless many things we can do to reduce the vulnerability of our landscapes to windthrow. Any tree can become a risk, but planting, growing and maintaining healthy trees with strong root systems, good trunk taper and strong branch unions will do the most to keep our community trees standing firm.

— David Stephenson
Community Forestry Coordinator

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More Information About Wind and Large Trees

The Wind in the Trees – North Dakota State University Extension Service (http://www.ag.ndsu.edu/trees/whatnew/Tree_Talk_July_2005.pdf)

Planning for and Coping with Natural Disasters – This website contains dozens of resources on planning for natural disasters, preventing damage to trees during storms and mitigating the damage in the aftermath of a natural disaster (http://www.idl.idaho.gov/bureau/community_forestry/techtreeinfo/tti_natural_disaster.htm)

Storm Damaged Trees: Prevention and Treatment – University of Georgia Extension Service (<http://pubs.caes.uga.edu/caespubs/pubcd/C806.htm>)

Storm Damage to Landscape Trees: Prediction, Prevention, and Treatment – University of Minnesota Extension Service (<http://www.extension.umn.edu/distribution/naturalresources/DD7415.html>)

Protecting Trees from Construction Damage: A Homeowner's Guide – University of Minnesota Extension Service (<http://www.extension.umn.edu/distribution/housingandclothing/DK6135.html>)

The Large Tree Argument: The Case for Large-Stature Trees vs. Small-Stature Trees – USDA Forest Service Pacific Southwest Center for Urban Forest Research (http://www.idl.idaho.gov/bureau/community_forestry/techtreeinfo/cufr_511_large_tree_argument.pdf)

New Publications Explain Community Forestry

Two new publications are available to help residents and businesses understand the importance of a healthy and safe urban forest – and what is being done locally to make it that way. Boise's is an 8-page booklet complete with a description of services and a list of how tree care is split between the city and residents adjacent to street trees. Nampa's is a leaflet that explains right-of-way planting and the city's Christmas tree recycling program. Copies are available from the respective city halls and can serve other Idaho communities as good examples of public education about trees.

How Does Your Community Shape Up?

Robert Tate, noted urban forestry consultant and retired executive director of the Western Chapter of the International Society of Arboriculture, was a speaker at the Idaho Horticulture Expo in January. From his many years of experience, Dr. Tate has compiled a list of characteristics and practices that are typical in communities with outstanding tree care programs and that best serve the interests of their residents and businesses. Take a moment to see how your community compares.



Idaho Community Trees is published four times a year by the College of Natural Resources, Department of Conservation Social Sciences, University of Idaho, Moscow, ID 83844. Direct editorial matters to James R. Fazio, Editor: 208/885-7209; fax 208/885-6226; e-mail jfazio@uidaho.edu.

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		<i>Practice or Characteristic</i>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Citizen advisory board (to help set policy, advocate for trees, etc.)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maintenance plan (based on sound arboricultural practices; cost/benefits considered; young tree care included)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PR & educational program (to publicize benefits of trees; teach tree care; warn about costs of deferred maintenance, etc.)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Management tracking, or accountability (evaluation of projects & activities; update street tree inventories)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	In-service training of employees and tree board (on a continuous basis to assure safety and use of best practices; includes the 'why' as well as 'how')
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Administrative support, i.e. competent and supportive community leaders
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Street tree inventory completed and used for management planning and budgeting
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Adequate funding for maintenance and enhancement of community trees; reduced reliance on grants and increased local support
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree ordinance (and well matched to the community's needs)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Planting plan to achieve desired tree density and diversity of species
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste wood utilization (to change removed trees or pruned material into an asset, e.g. as fuel wood, compost, mulch, sale to woodworkers, etc.)

Community Transportation Enhancement Grants Awarded for 2006-07

The Idaho Department of Lands Community Forestry Program in partnership with the Idaho Transportation Department has awarded grants to 13 cities to enhance their roads, bikeways and pedestrian pathways through tree planting and other improved landscaping. A total of \$162,000 was awarded and will leverage over \$186,000 in additional city contributions (shown below in parentheses).

- ♦ Ammon, \$15,000 (\$18,509)
- ♦ Boise, \$5,848 (\$3,830)
- ♦ Coeur d'Alene \$4,000 (\$2,876)
- ♦ Craigmont \$14,892 (\$5,140)
- ♦ Emmett \$15,000 (\$5,105)
- ♦ Hailey \$15,000 (\$46,772)
- ♦ Idaho Falls \$14,280 (\$16,037)
- ♦ Jerome \$8,310 (\$3,303)
- ♦ Mountain Home \$15,000 (\$16,922)
- ♦ Paul \$15,000 (\$31,810)
- ♦ Payette \$15,000 (\$13,237)
- ♦ Salmon \$9,670 (\$4,126)
- ♦ Twin Falls \$15,000 (\$18,995)

Be a Voice for Trees

As comprehensive plans come up for revision throughout Idaho, voices are needed to speak up for including trees as an essential part of our cities' infrastructures. Where tree boards exist, this should be an important part of your work; where there is no tree board, the responsibility rests on all who care about trees. Remember, trees provide far more than beauty and summer shade – they economically enhance businesses and shopping areas, reduce storm water runoff, save energy, extend the life of street surfaces, significantly reduce air pollution, and provide other 'ecosystem services.' Trees are an *investment* that often returns as much as \$1.40 per year on each dollar spent. Trees are a good but little-understood investment! Please make sure they are a prominent part of planning in your community.

Calendar – Winter/Spring 2007

February 19-20

Utility Vegetation Management Regional Meeting, Salt Lake City Utah. (Contact Utah Chapter ISA at (801) 446-8229)

February 24, March 24 and/or April 21

Spring Arborist Series, Utah Valley State College, Orem Utah. (Contact Lisa at (801) 446-8229 or visit <http://www.utahurbanforest.org/events.html>)

March 23

Tree Risk Assessment Workshop, Spokane County Conservation District, Spokane, WA. (Contact Garth Davis at (509) 535-7274 or visit <http://www.sccd.org/forestry/Events.shtml>)

April 16-18

Trees & Utilities National Conference, Las Vegas, NV. (National Arbor Day Foundation at (402) 474-5655, or www.arboday.org)

April 27

ARBOR DAY!

May 1-2

Trees, People, & the Law Symposium, Seattle, WA. (National Arbor Day Foundation at (402) 474-5655 or www.arboday.org)

June 14-15

Idaho Community Forestry Advisory Council Meeting, Coeur d'Alene, ID. (Contact Gene Gray at 208/739-3443 or geneusmc@srvinet.com)

June 18–20

Urban Wildlife Management National Conference, World Forestry Center, Portland, OR. (National Arbor Day Foundation at (402) 474-5655, or www.arboday.org)

July 28 – August 1

International Society of Arboriculture Annual Conference & Trade Show, Honolulu, HI. (Contact: <http://www.isa-arbor.com/conference/>)

Upcoming Certified Arborist, Municipal Arborist, Utility Arborist, and Certified Tree Worker Written Exams

April 14 — Spokane, WA – afternoon exam²

May 17 — Orem, UT¹

June 2 — Twin Falls, ID – morning exam²

June 16 — Boise, ID – morning exam²

TBA — Pocatello, ID²

Upcoming Certified Tree Worker Skills Exam

June 16 — Boise, ID – morning exam²

¹For information or to register, contact: Utah Chapter, International Society of Arboriculture at (801) 446-8229 or email: Lisa@UtahUrbanForest.org.

²For information or to register, contact: Pacific Northwest Chapter, International Society of Arboriculture at 503/874-8263 or 217-355-9411 or email: info@pnwisa.org.

Note that applications must be submitted at least 20 days in advance of the exam.



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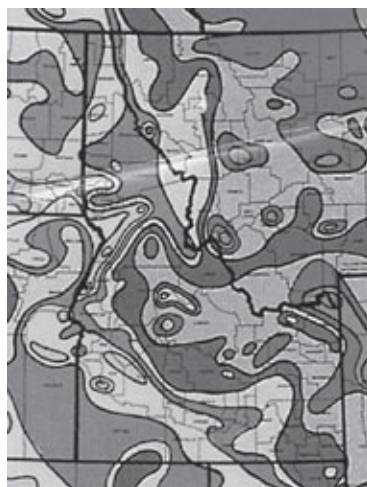
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Tree tip

Check Your Hardiness Zone Before You Plant

For healthy, long-lived trees in your community, the first step before planting is to check the suitability of desired species for the available sites. This includes shade tolerance, resistance to compaction or air pollution, water needs and similar factors. However, your first step should be to determine if the species can tolerate the average lowest temperatures in your area. This is its hardiness rating and should be compared with the hardiness zone in which you are located. The easiest way to find your hardiness zone is to visit the website: www.arborday.org/treeinfo/zonelookup.cfm. All you have to do is type in your postal zip code and you will instantly have your hardiness zone. You can also use this site to find the hardiness rating for individual species (just click on "trees"), or search by tree or site characteristics at another helpful site: http://selecttree.calpoly.edu/attribute_search.lasso.



For a precise determination of the hardiness zone in your community and to find a lot of other tree information, visit National Arbor Day Foundation's website.